UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5

IN THE MATTER OF:	)	
Archer Daniels Midland Company	)	Notice of Violation
Decatur, Illinois	)	EPA-5-99-IL-24
PROCEEDINGS PURSUANT TO	)	
SECTION 113(a)(1) and (3) OF	)	Finding of Violation
THE CLEAN AIR ACT, AS AMENDED,	)	EPA-5-99-IL-25
42 U.S.C. §7413(a)(1) and (3)	)	

STATUTORY AUTHORITY

This Notice of Violation (NOV) and Finding of Violation (FOV) is issued pursuant to Section 113(a)(1) and (3) of the Clean Air Act (Act), 42 U.S.C. §7413(a)(1) and (3), respectively. You are hereby notified that the Administrator of the United States Environmental Protection Agency (U.S. EPA), by authority duly delegated to the undersigned, finds Archer Daniels Midland Company (ADM) to be in violation of Subtitle I, Part C of the Act, the Prevention of Significant Deterioration (PSD) of Air Quality Regulations set forth at 40 C.F.R. §52.21, the Illinois State Implementation Plan (SIP), state opacity limits, construction permit conditions, and New Source Performance Standards (NSPS) for Equipment Leaks of VOC in the Synthetic Organic Chemical Manufacturing Industry (SOCMI).

REGULATORY BACKGROUND

1. On June 19, 1978, the Administrator of U.S. EPA promulgated regulations to prevent the significant deterioration of air quality pursuant to Subtitle I, Part C of the Act. These regulations are codified at 40 C.F.R. §52.21 (the "PSD regulations").

2. On April 8, 1980, delegation of PSD authority to review and process permit applications was granted to the Illinois Environmental Protection Agency (IEPA).

3. On August 7, 1980, the provisions of 40 C.F.R. §52.21(b) through (w) were incorporated into and made part of the Illinois SIP. 45 Fed. Reg. 52741.

4. 40 C.F.R. §52.21(i) prohibits construction of a major stationary source or major modification to a major stationary source in an area which has attained the National Ambient Air Quality Standards (NAAQS) without first applying for and receiving a permit to construct issued under the PSD regulations.

5. Any owner or operator of a source subject to PSD regulations who commences construction without applying for and receiving a permit

to construct under the PSD regulations is subject to enforcement action. 40 C.F.R. §52.21(r).

6. The Illinois SIP was promulgated on May 31, 1972. Federal Register, Vol. 37, No. 105. On May 31, 1972, U.S. EPA approved 35 Illinois Administrative Code (IAC) §201.142 and 135 IAC §201.143 as part of the federally enforceable SIP for the State of Illinois. 37 Fed. Reg. 10862.

7. 35 IAC §201.142, entitled "Construction Permits for New Sources" applies to any new emission source or new air pollution control equipment, for which construction or modification commenced on or after April 14, 1972. A person shall obtain a construction permit from the IEPA before causing and allowing the construction of the new sources.

8. 35 IAC §201.143, entitled "Operating Permits for New Sources" applies to any new emission source or new air pollution control equipment, for which construction or modification commenced on or after April 14, 1972. A person shall obtain an operating permit from the IEPA before causing and allowing the operation of the new sources.

9. On December 29, 1992, U.S. EPA approved Title 35 of Illinois Administrative Code (35 IAC) §212.122 and §212.123 as part of the federally enforceable SIP for Illinois. 57 Fed. Reg. 61834. The effective date of the approval was March 1, 1993.

10. 35 IAC §212.122, entitled "Limitations for Certain New Sources," applies to each new emission source which has an actual heat input greater than 250 mmbtu/hr. A "new emission source" is defined by 35 IAC §201.102 to mean any emission source for which construction began after April 14, 1972. 35 IAC §212.123, entitled "Limitations for All Other Sources," applies to any emission source that is not subject to 35 IAC §212.122.

11. 35 IAC §212.123 provides an opacity limitation of 30 percent for smoke or other particulate matter emissions into the atmosphere from any emission source. The rule includes an exception which allows for the emission of smoke with an opacity greater than 30 percent, but less than 60 percent, for a period totaling 8 minutes in a 60 minute period. This exception is limited to one emission source per facility within a 1,000 foot radius, and only applies three times in a 24 hour period.

12. Section 111(e) of the Act prohibits any owner or operator of a subject stationary source from operating such source in violation

of any applicable standard of performance promulgated pursuant to Section 111 of the Act.

13. On October 18, 1983, in accordance with Section 111(b) of the Act, U.S. EPA promulgated New Source Performance Standards (NSPS) for Equipment Leaks of VOC in the Synthetic Organic Chemical Manufacturing Industry, 40 C.F.R. §§60.480 - 60.489 (Subpart VV).

14. The regulations at 40 C.F.R. Part 60, Subpart VV apply to, among other sources, equipment used in the synthetic organic chemical manufacturing industry for which construction or modification commenced after January 5, 1983. Equipment is defined in 40 C.F.R. §60.481 as each pump, compressor, pressure relief device, sampling conection system, open-ended valve or line, valve, and flange or other connector in VOC service and any devices or systems required by this subpart. Owners or operators of such equipment are also subject to the NSPS General Provisions at 40 C.F.R. §§60.1 - 60.17.

15. The regulation at 40 C.F.R. §60.482-4(a) prohibits the owner or operator of a subject unit from discharging any detectable emissions as indicated by an instrument reading of less than 500 ppm above background as determined by the methods specified in 40 C.F.R. §60.485(c).

16. The regulation at 40 C.F.R. §60.482-4(b)(1) and (2) requires the owner or operator of a pressure relief device after each pressure release, to return the pressure relief device in gas/vapor service to a condition of no detectable emissions, mentioned above, no later than 5 calendar days after the pressure release.

SPECIFIC FINDINGS AND DETERMINATION

17. ADM owns and operates a complex of buildings in Decatur, Illinois producing food and kindred products, medicinal and botanical products and food crops grown undercover (the ADM Decatur complex). ADM's Decatur complex consists of the East campus, which contains a Specialty Soybean Processing Plant and related plants, Wet Corn Processing Plant; a Bio-products Plant; Co-generation (power) Plant; Vitamin C Plant; Xanthum Gum Plant; Lactic Acid Plant; Ethanol Plant or Denatured Alcohol Plant; and a Hydroponics/aqua-Culture Farm; and its West campus, which consists of plants involved in the production of oil from soybeans by solvent extraction; the production of oil from corn germ using a press and solvent extraction process; the secondary refining of vegetable oils from the crude state with hydrogenation and deodorization processes; the conversion of vegetable distillates into vitamin E products; a De-oiled Lecithin Plant; and a Wastewater Treatment Plant.

18. ADM owns and operates feed dryers and meal dryers located at its East Corn Plant at 4666 Faries Parkway in its Decatur complex. Emissions from the feed dryers and meal dryers at ADM's Decatur facility are subject to the opacity limit set forth at 35 IAC §212.123. 35 IAC §212.122 does not apply to ADM's dryers because this rule applies only to any fuel combustion emission unit or source whose primary purpose is to produce heat or power by indirect heat transfer.

19. The ADM Decatur complex is located in Macon County, Illinois, an area which has been designated as an attainment area for the particulate matter NAAQS.

20. The ADM Decatur complex, which comprises the East and West campuses, is a major emitting facility as defined at Section 169 of the Act. It has the potential to emit a number of pollutants in quantities greater than 250 tons per year.

21. The ADM Decatur East Corn Plant is located at 4666 Faries Parkway in Decatur, Illinois. In 1989, the plant contained five feed dryers, designated by ADM as dryers 1-5.

22. On November 17 1989, ADM applied for a construction permit to expand the East Corn Plant. ADM proposed a production capacity increase in its corn plant from 360,000 bushels per day to 500,000 bushels per day and the addition of one feed dryer designated as feed dryer number 6. The construction permit was assigned the number 89110058. Construction permit number 89110058 was never issued by IEPA.

23. On March 11, 1992, ADM applied for a construction permit for feed dryer number 6. On June 16, 1992, IEPA issued construction permit number 92030021. IEPA simultaneously denied the operating permit for feed dryer number 6.

24. On July 21, 1992, ADM filed with the Clerk of the Pollution Control Board a petition, appealing the construction permit for feed dryer number 6 (permit number 92030021).

25. Sometime before or after the construction of feed dryer number 6 was completed, ADM's throughput in the Decatur East Corn Plant rose to approximately 500,000 bushels per day. On August 25, 1998, prior to the start of stack testing required by U.S. EPA, the data present at the ADM's East Corn Plant showed that the plant had an average daily operating rate of 502,000 bushels per day.

26. The average of the results of the August 25, 1998 and October 13, 1998 stack tests (summarized in Attachment A) shows PM emission

rate of 63.91 lb/hr for feed dryers 1-6, with an emission rate of approximately 20.21 lb/hr of PM emissions for feed dryer number 6 by itself. The total emissions for feed dryers 1-6 is calculated to be 280 tons per year. The total emissions for feed dryers number 1-5 is summarized in Attachment B and are calculated at 191 tons per year.

27. Based on the above, the increase in throughput and the addition of feed dryer number 6 has the potential to emit particulate matter (PM) in excess of the "significant" threshold of 25 tons per year, as defined at 40 C.F.R. §52.21(b)(23). Therefore, the increase in throughput at the East Corn Plant and construction of the feed dryer number 6 constituted a major modification to an existing PSD major source.

28. ADM increased throughput at the corn plant and commenced construction of feed dryer number 6 without obtaining a permit to construct issued under the PSD regulations.

29. ADM's increase in throughput at the corn plant and the construction of the feed dryer number 6 without a permit to construct is a violation of Section 165 of the Clean Air Act, 42 U.S.C. §7475; 40 C.F.R. §52.21(i)(1); and the Illinois SIP.

30. ADM has been operating its Decatur East Corn Plant without an operating permit issued from IEPA since November 11, 1987. This is a violation of 35 IAC §201.143.

31. ADM has been operating the De-oiled Lecithin Plant without an operating permit issued from IEPA. This is a violation of 35 IAC §201.143.

32. ADM has not completed a compliance test of the De-oiled Lecithin Plant within 180 days after initial start-up. This is a violation of Special Condition 10 a of Construction Permit number 95050025.

33. ADM constructed a new bleaching clay removal system which will be vented to the solvent recovery system without obtaining a permit to construct from IEPA. This is a violation of 35 IAC §201.142.

34. ADM constructed a new baghouse control unit for a fluid bed dryer and the lecithin packaging unit without obtaining a permit to construct from IEPA. This is a violation of 35 IAC §201.142.

35. ADM constructed an additional lecithin desolventizer/dryer without obtaining a permit to construct from IEPA. This is a violation of 35 IAC §201.142.

36. ADM failed to maintain accurate and complete records for the verification of the VOM material balance accounting system. This is a violation of Special Condition 9 a of Construction Permit number 95050025.

37. On August 26, 1997, U.S. EPA inspectors at ADM's Decatur facility observed visible emissions from the feed dryer number 1-4 stack, which ADM calls the "super stack", and visible emissions from the feed dryer number 5-6 stack, which ADM calls "5/6 packed tower stack", that exceeded the 30 percent opacity limitation found at 35 IAC §212.123. The opacity readings for the "super stack" showed a total of 32.25 minutes of exceedances during an observation period of 42 minutes. Visible emissions from ADM's "super stack" violated the opacity limitation for 30 minutes, as summarized in Table 1, below.

38. Also on August 26, 1997, opacity readings for the "5/6 packed tower stack" showed a total of 35.5 minutes of exceedances. After taking into account the 8-minute exception provided for in 35 IAC §212.123, visible emissions from ADM's "5/6 packed tower stack" violated the opacity limitation for 28 minutes. The readings are summarized in Table 2, below.

Table 1

Visible Emission Violations for "Super Stack"

Date	Time	6-minute average opacity observed	Time in Violation
8/26/97	5:00 - 5:06	38.5 %	
	5:18 - 5:24	40.4 %	
	5:24 - 5:30	43.5 %	
	5:30 - 5:36	37.5 %	
	5:36 - 5:42	44.2 %	

Table 2

Visible Emission Violations for Feed Dryers number 5 & 6 Stack

Date	Time	6-minute average opacity observed	Time in Violation
8/26/97	5:00 - 5:06	36.3 %	

	5:12 - 5:18	35.6 %	
	5:18 - 5:24	36.9 %	
	5:24 - 5:30	47.3 %	
	5:30 - 5:36	35.0 %	
	5:36 - 5:42	41.0 %	28 minutes ★

★ Eight minute exemption applied

39. On October 13, 1998, during a stack test, ADM personnel observed visible emissions from the "5/6 packed tower stack" that exceeded the 30 percent opacity limitation found at 35 IAC §212.123. The opacity readings for the feed dryers stack showed a total of 56 minutes of exceedances during an observation period of 60 minutes for test run number 1. For test run number 2 and 3, the opacity reading exceeding 30 percent totaled 56 minutes and 46 minutes, respectively. After taking into account the 8-minute exception provided for in 35 IAC §212.123, visible emissions from ADM's "5/6 packed tower stack" violated the opacity limitation for 40 minutes for test run number 1, 46 minutes for test run number 2, and 34 minutes for test run number 3. The analysis of the results of the three test runs are summarized in Table 3, 4, and 5 below.

Table 3

Visible Emission Violations for Feed Dryers number 5 & 6 Stack
Test Run Number 1

Date	Time	6-minute average opacity observed	Time in Violation
10/13/98	8:34 - 8:40	36.0 %	
	8:41 - 8:47	35.0 %	
	8:47 - 8:53	37.5 %	
	8:53 - 8:59	33.1 %	
	8:59 - 9:05	38.1 %	
	9:05 - 9:11	33.4 %	
	9:12 - 9:18	35.6 %	
	9:20 - 9:26	35.0 %	40 minutes ★

★ Eight minute exemption applied

Table 4

Visible Emission Violations for Feed Dryers number 5 & 6 Stack
Test Run Number 2

Date	Time	6-minute average opacity observed	Time in Violation
10/13/98	10:19 - 10:25	30.4 %	
	10:25 - 10:31	34.0 %	
	10:31 - 10:37	36.5 %	
	10:38 - 10:44	36.3 %	
	10:45 - 10:51	35.8 %	
	10:51 - 10:57	34.6 %	
	10:59 - 11:05	33.8 %	
	11:05 - 11:11	32.5 %	
	11:11 - 11:17	35.2 %	46 minutes ★

★ Eight minute exemption applied

Table 5

Visible Emission Violations for Feed Dryers number 5 & 6 Stack
Test Run Number 3

Date	Time	6-minute average opacity observed	Time in Violation
10/13/98	11:55 - 12:01	31.0 %	
	12:07 - 12:13	31.3 %	
	12:13 - 12:19	35.0 %	
	12:19 - 12:25	31.9 %	
	12:26 - 12:32	31.5 %	
	12:35 - 12:41	32.9 %	
	12:49 - 12:55	33.1 %	34 minutes ★

★ Eight minute exemption applied

40. On August 28, 1997, ADM's leak pressure relief devices at its Denatured Alcohol Plant, tag numbers BR1-4512, BR2-5447, BR4-7102, and G2-12240, were not repaired within 5 calendar days after the pressure release. This is a violation of 40 C.F.R. §60.482-4.

41. On December 4, 1998, U.S. EPA issued a NOV citing ADM for failure to comply with the emission limits set forth in 35 IAC §212.321. This information regarding the applicability of 35 IAC §212.321 was found in ADM's Title V Permit application.

42. In a January 19, 1999, letter to U.S. EPA, ADM claimed that rule 35 IAC §212.321 does not apply to its feed dryers and that 35 IAC §212.361 is the applicable rule. This contradicts the information provided in ADM's Title V Permit application. ADM's Title V application improperly contained a certification attesting to the accuracy of erroneous information regarding applicable regulatory requirements.

NOTICE OF VIOLATION

The Administrator of U.S. EPA, by authority duly delegated to the undersigned, notifies the State of Illinois and ADM, that the facility described above is in violation of the Federally enforceable PSD regulations found at 40 C.F.R. §52.21, Illinois SIP, construction permit conditions, and 35 IAC §212.123, as set forth in this Notice of Violation.

This NOV supersedes the NOV numbered EPA-5-99-2 that was sent to ADM on December 4, 1998. ADM claimed that the rule 35 IAC §212.321 cited in EPA-5-99-2 does not apply to ADM feed dryers although the company's Title V permit indicated otherwise. The NOV was based on the information provided in the Title V permit application.

6/8/99
Date

Margaret M. Guerriero, Acting Director
Air and Radiation Division

FINDING OF VIOLATION

The Administrator of U.S. EPA, by authority duly delegated to the undersigned, notifies the State of Illinois and ADM, that the facility described above is in violation of the New Source Performance Standards (NSPS) for Equipment

Leaks of VOC in the Synthetic Organic Chemical Manufacturing Industry (Subpart VV), as set forth in this Finding of Violation.

6/8/99
Date

Margaret M. Guerriero, Acting Director
Air and Radiation Division

CERTIFICATE OF MAILING

I, Betty Williams, do hereby certify that a Finding of Violation and Notice of Violation was issued pursuant to the Clean Air Act, was sent by Certified Mail, Return Receipt Requested, to:

Mark Calmes, Director Corporate Environmental Engineering Services
Archer Daniels Midland Company
Box 1470
Decatur, Illinois

I also certify that copies of the Finding of Violation and Notice of Violation were sent by first class mail to:

David Kolaz, Chief
Compliance and Systems Management Section
Bureau of Air
Illinois Environmental Protection Agency
1021 North Grand Avenue East
Springfield, Illinois 62702

John Justice, Regional Manager
Region III
Illinois Environmental Protection Agency
2009 Mall Street
Collinsville, Illinois 62234

on the 10th day of June, 1999.

Betty Williams

Betty Williams, Secretary
AECAS, (IL/IN)

CERTIFIED MAIL RECEIPT NUMBER: P 140 779 129